

1 ¹~~40~~. (New) A method for controlling data transmission over a data network, the
2 method comprising:
3 copying data to be transmitted from a main memory in a host computer to a buffer
4 memory in a network controller while unallocated buffer memory locations remain
5 available;
6 transmitting data from the buffer memory over a physical link of the data network
7 when a threshold quantity of the data has been copied to the buffer memory; and
8 providing an indication to the host computer that a frame of data has been
9 successfully transmitted over the physical link of the data network when the frame of data
10 has been merely copied to the buffer memory.

D 1 ²~~41~~. (New) The method of claim ¹~~40~~, further comprising:
2 unallocating memory locations in the buffer memory upon successful transmission
3 of the frame of data over the physical link.

1 ³~~42~~. (New) The method of claim ¹~~40~~, wherein the threshold quantity of data is less than
2 a frame of data.

1 ⁴~~43~~. (New) The method of claim ¹~~40~~, wherein the threshold quantity of data is greater
2 than a frame of data.

1 ⁵~~44~~. (New) The method of claim ¹~~40~~, wherein the network controller monitors transmit
2 events while transmitting data over the physical link of the data network.

1 ⁶~~45~~. (New) The method of claim ⁵~~44~~, wherein the network controller maintains a
2 statistical history of transmit events identified while transmitting data over the physical
3 link of the data network.

1 ⁷~~46~~. (New) An apparatus facilitating the transmission of data over a physical link of a
2 data network, the apparatus comprising:

3 a buffer memory having a plurality of memory locations; and
4 a controller, coupled to the buffer memory, to initiate transmission of data over
5 the physical link once a threshold quantity of data has been copied into the buffer memory
6 from a communicatively coupled host computer, and to provide an indication to the host
7 computer of successful frame transmission over the physical link when a predetermined
8 quantity of data has been merely copied to the buffer memory.

1 ⁸
~~47~~. (New) The apparatus of claim ⁷~~46~~, wherein the predetermined quantity of data is a
2 frame of data.

1 ⁹
~~48~~. (New) The apparatus of claim ⁷~~46~~, wherein the indication is a transmit complete
2 signal.

1 ¹⁰
~~49~~. (New) The apparatus of claim ⁷~~46~~, wherein the controller monitors transmit events
2 while data is being transmitted over the physical link of the data network.

1 ¹¹
~~50~~. (New) The apparatus of claim ⁷~~46~~, further comprising a storage medium wherein a
2 statistical history compiled by the controller is maintained.

1 51. (New) A storage medium having stored therein a plurality of executable
2 instructions which, when executed, implement a transmission flow control service in a
3 network controller having a number of functions including a function to provide to a
4 communicatively coupled host computer an indication of successful transmission of a
5 predetermined quantity of data over a physical link of a data network when, in fact, the
6 predetermined quantity of data has merely been copied from the host computer to a buffer
7 memory of the network controller, before actual transmission of the predetermined
8 quantity of data over the physical link has been completed.

1 52. (New) The storage medium of claim 51, wherein the transmission flow control
2 service further comprises a function to monitor transmit events which occur on the data